

Figure 1: Sample Protected Storage Grid deployment

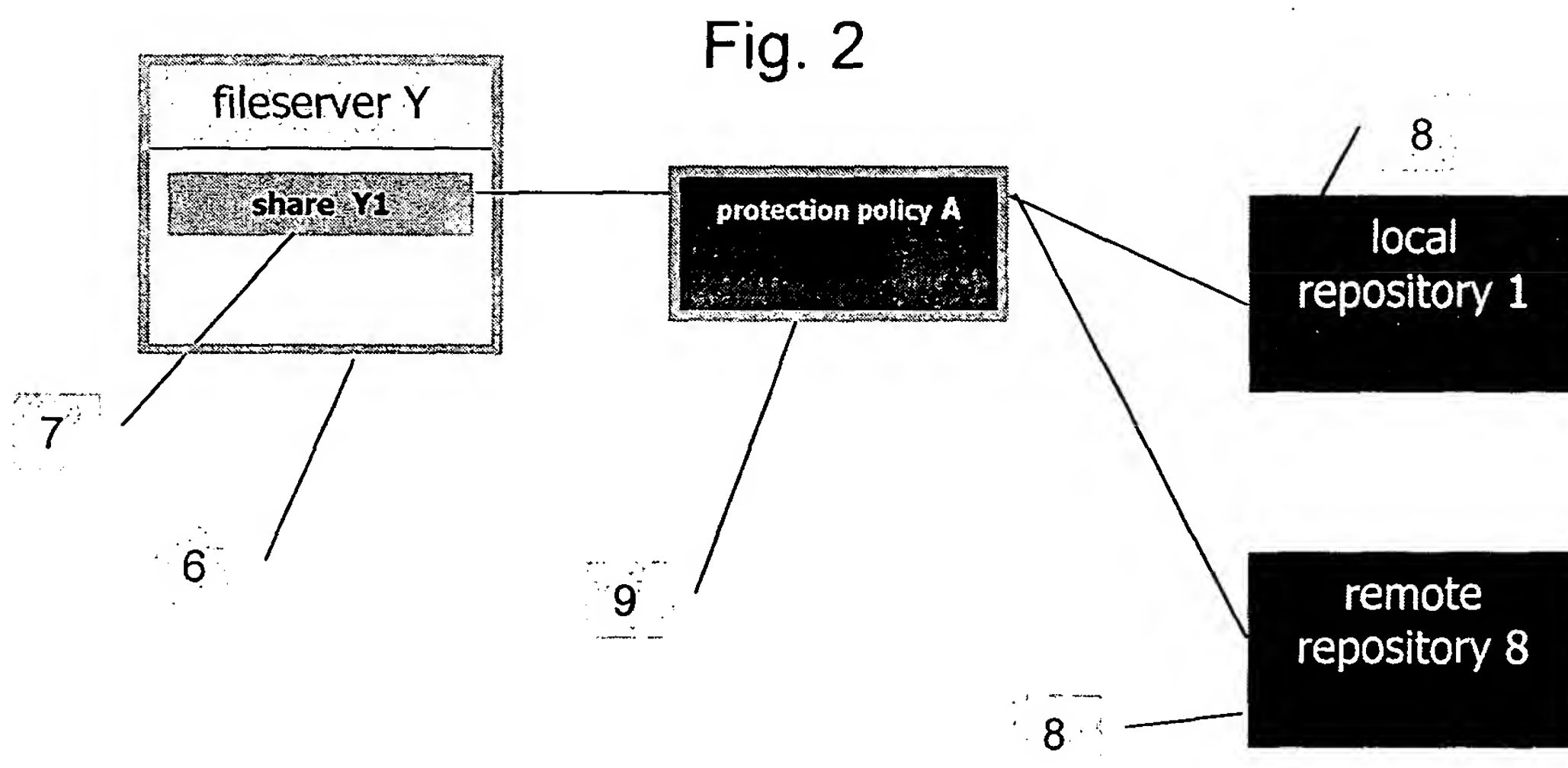


Figure 2: protection policy

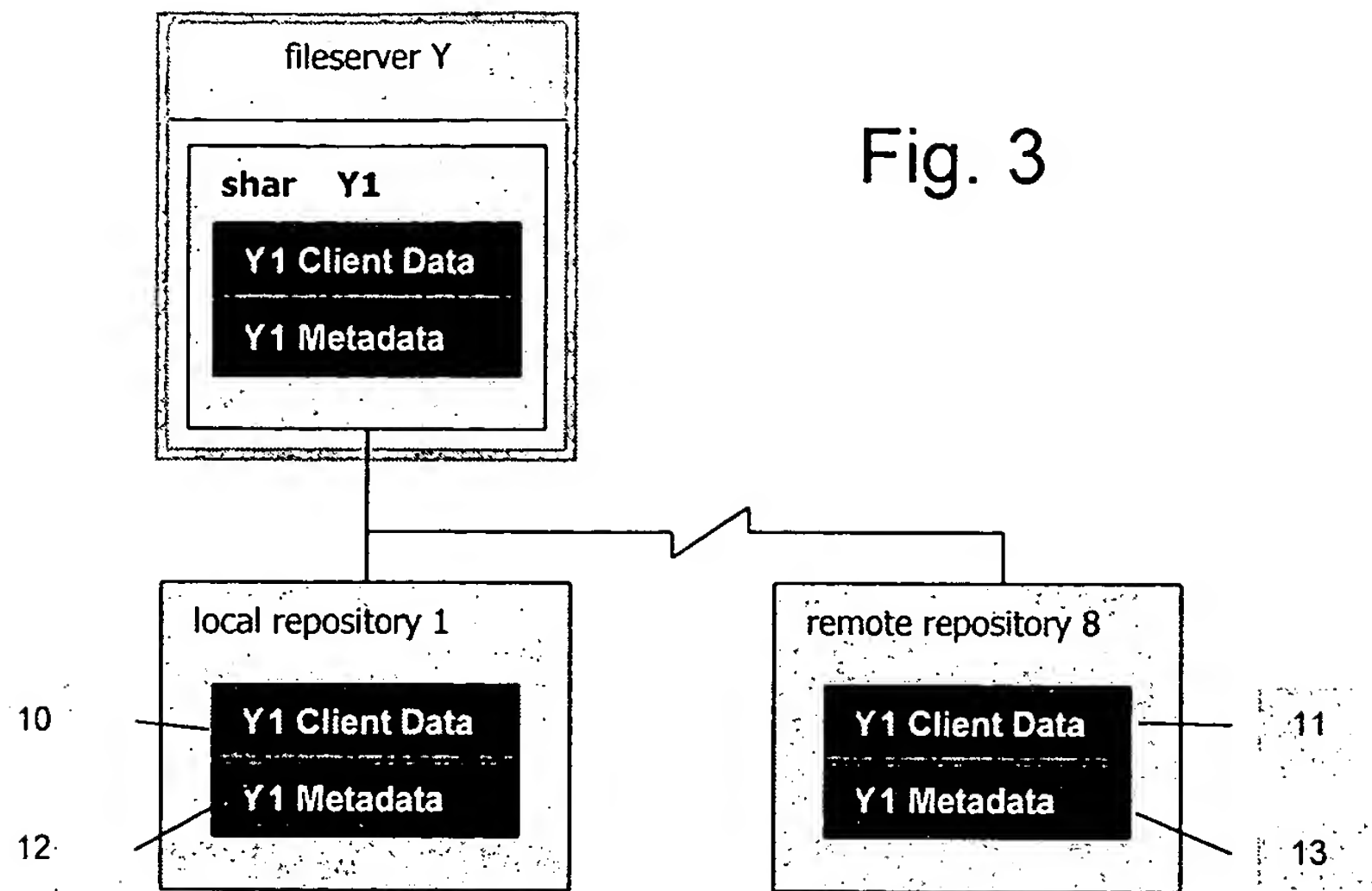


Fig. 3

Figure 3: Fileserver Recovery - Before Recovery

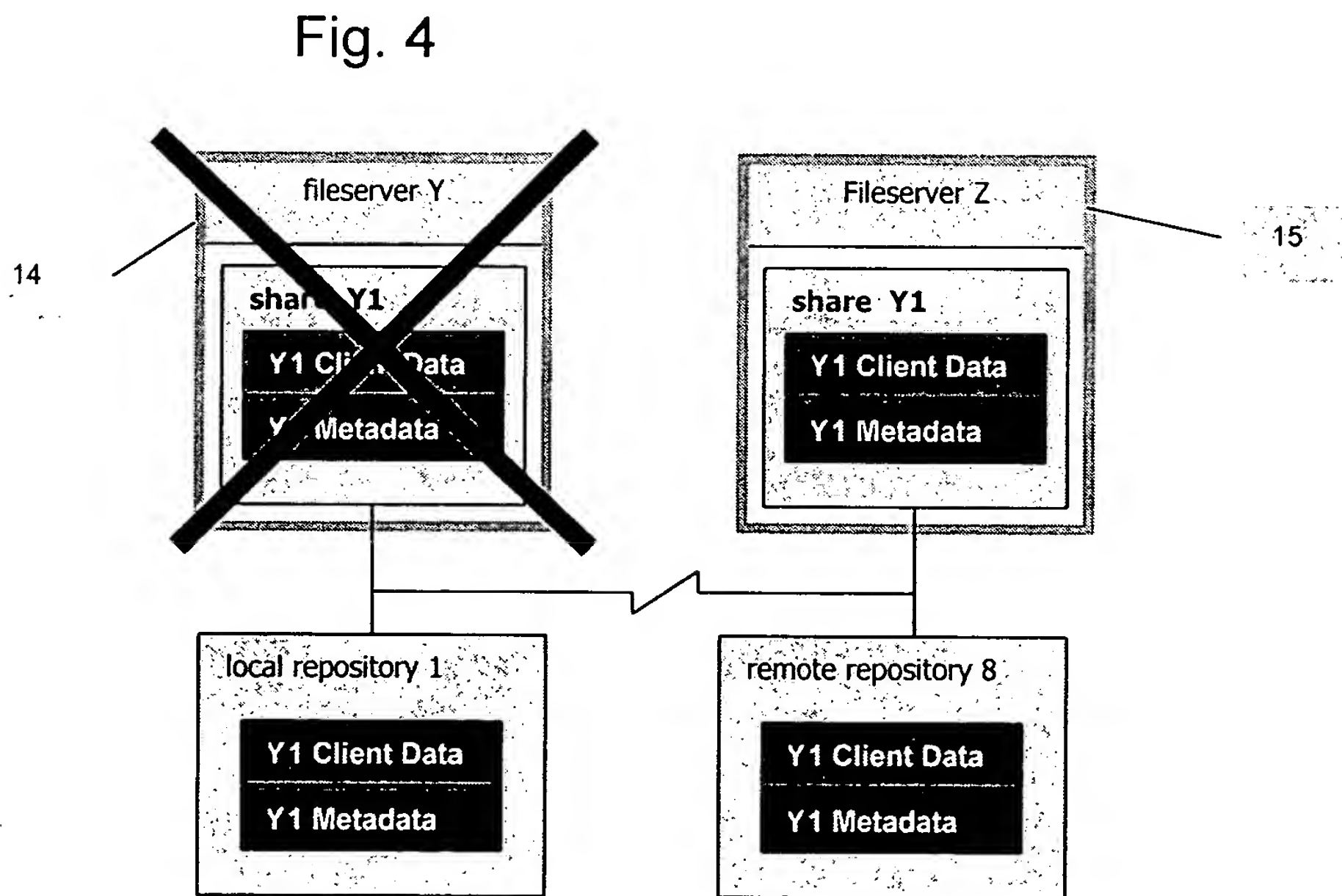


Fig. 4

Figure 4: Fileserver Recovery - After Recovery

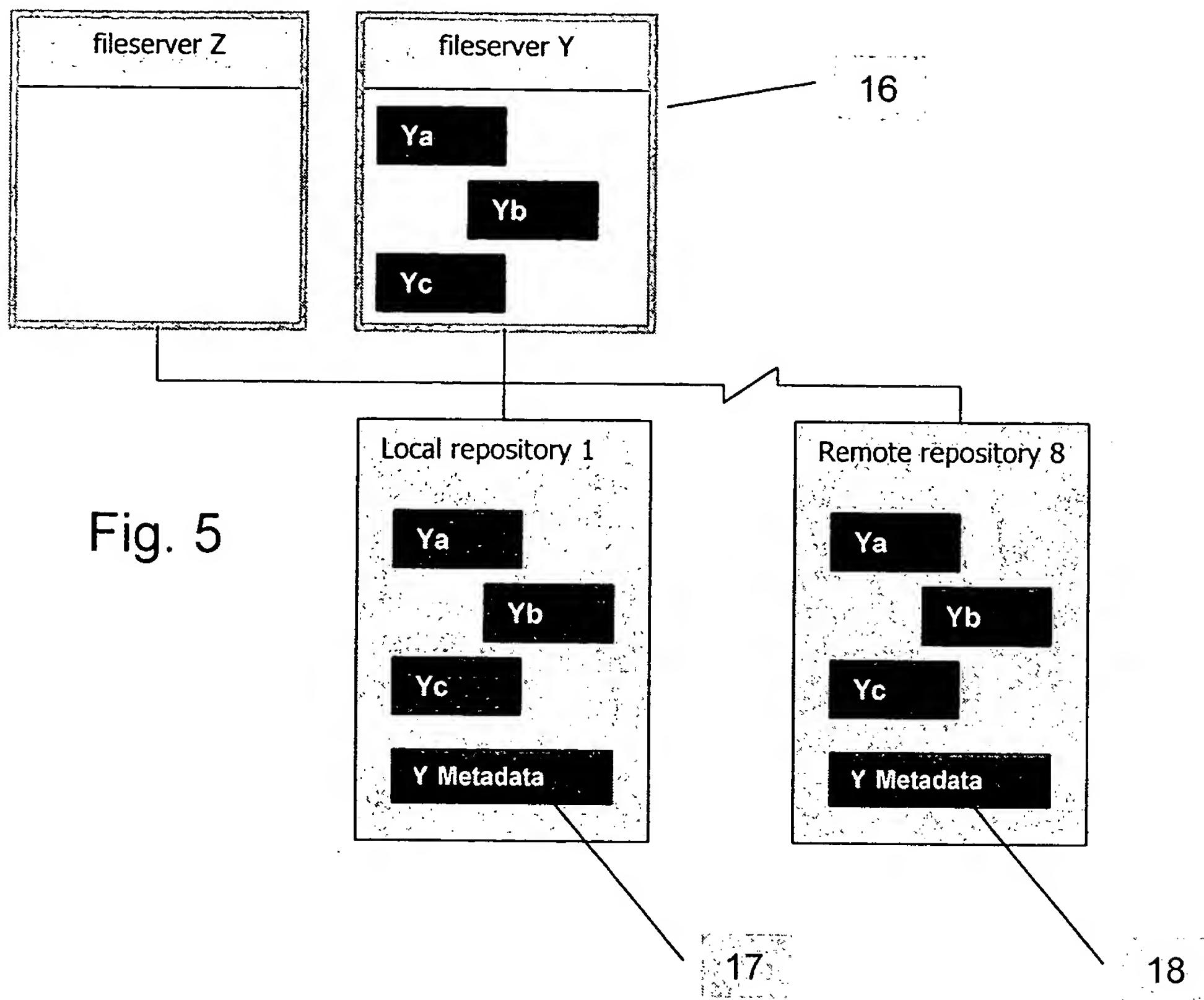


Figure 5: Share Migration - before Migration

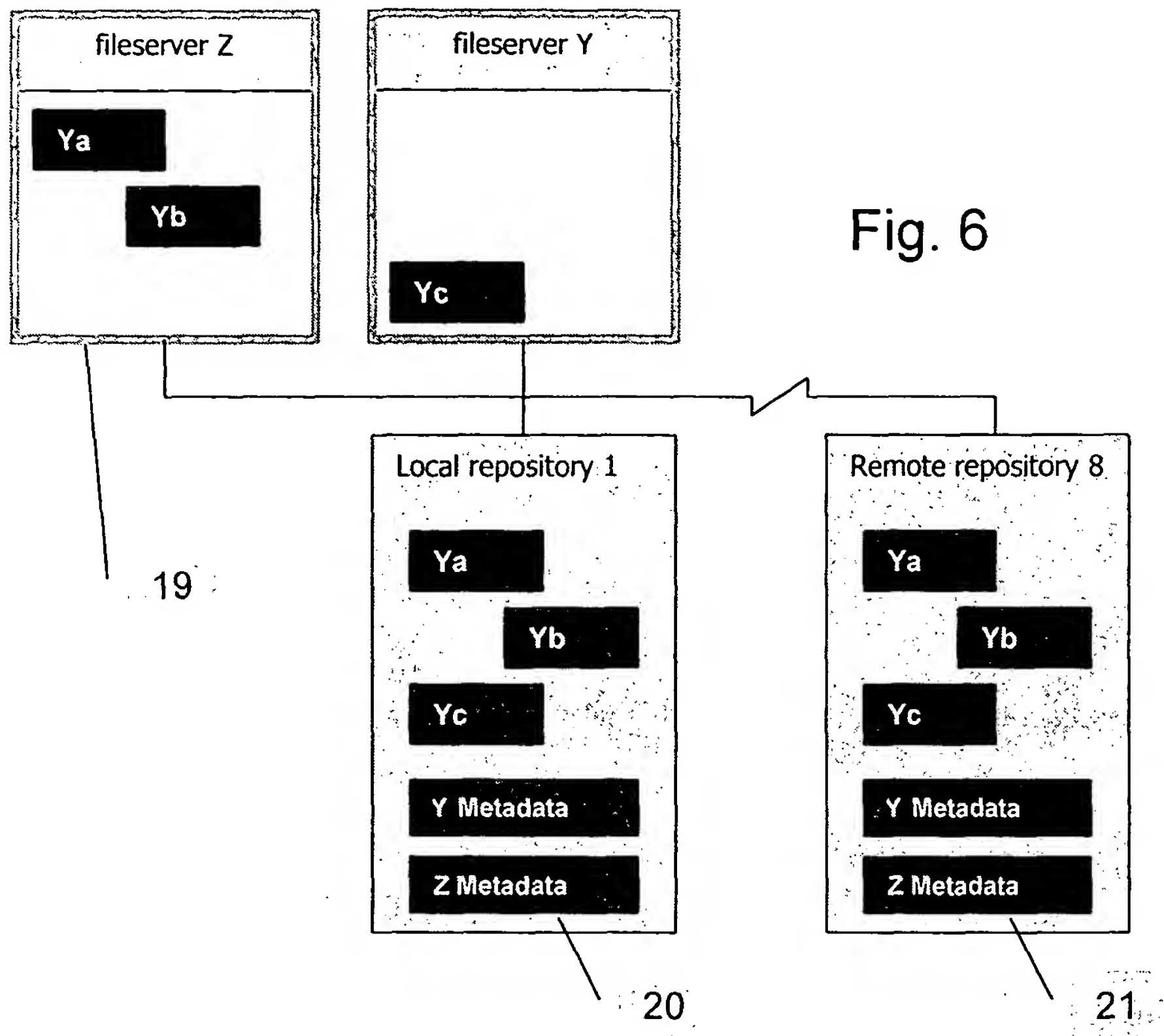


Figure 6: Share Migration - after Migration

The screenshot shows a web-based user interface for migrating shares. The title is 'Migrate Shares to another GRIDPort'. Below the title, it says 'Select Shares to migrate, and which GRIDport to migrate to.' There is a table with the following columns: 'Migrate', 'Share Name', 'Host GRIDport', 'Target GRIDport', 'Status', and 'Tasks'. The table contains two rows of data. The first row has a checked checkbox, 'TEST1', 'GPNEON', 'GPXEON', 'migrate', and an empty task cell. The second row has an unchecked checkbox, 'test2', 'GPNEON', 'GPXEON', 'online', and an empty task cell. A line labeled '24' points to the 'Migrate' column header. A line labeled '22' points to the 'Migrate' checkbox in the first row. A line labeled '23' points to the 'Share Name' column header. A line labeled '25' points to the 'Status' column header. A line labeled '26' points to the 'Tasks' column header.

Migrate	Share Name	Host GRIDport	Target GRIDport	Status	Tasks
<input checked="" type="checkbox"/>	TEST1	GPNEON	GPXEON	migrate	
<input type="checkbox"/>	test2	GPNEON	GPXEON	online	

Figure 7: User Interface for share migration

Fig. 8

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General	Policy Identification
CIFS Sharing	Share: GP_Marketing\Marcom2
NFS Sharing	Protect this share: <input checked="" type="checkbox"/>
FTP Sharing	Protection Policy Name: marcom2
Protection Policy	Description: 2 Local, 0 Remote
	User Data: D135
	Protection Management
	Backup Frequency: 1 Hour
	Replicas: 2 Replicas in New York/Hudson
	1 Replicas in New York/3 Charles
	0 Replicas in Boston
	Version Management
	Keep Version History <input checked="" type="checkbox"/>
	Version Compression: Delta Compression
	Version Compaction: <input checked="" type="checkbox"/> Keep only one daily version after 7 days
	<input checked="" type="checkbox"/> Keep only one weekly version after 4 weeks
	<input checked="" type="checkbox"/> Keep only one monthly version after 12 months
	<input checked="" type="checkbox"/> Keep only one version after 2 years
	Advanced Options Hide
	<input type="checkbox"/> Purge all versions of files that are deleted from this share 7 days after they are deleted.
	Caching Level: High

Fig 8. The present invention's protection policy

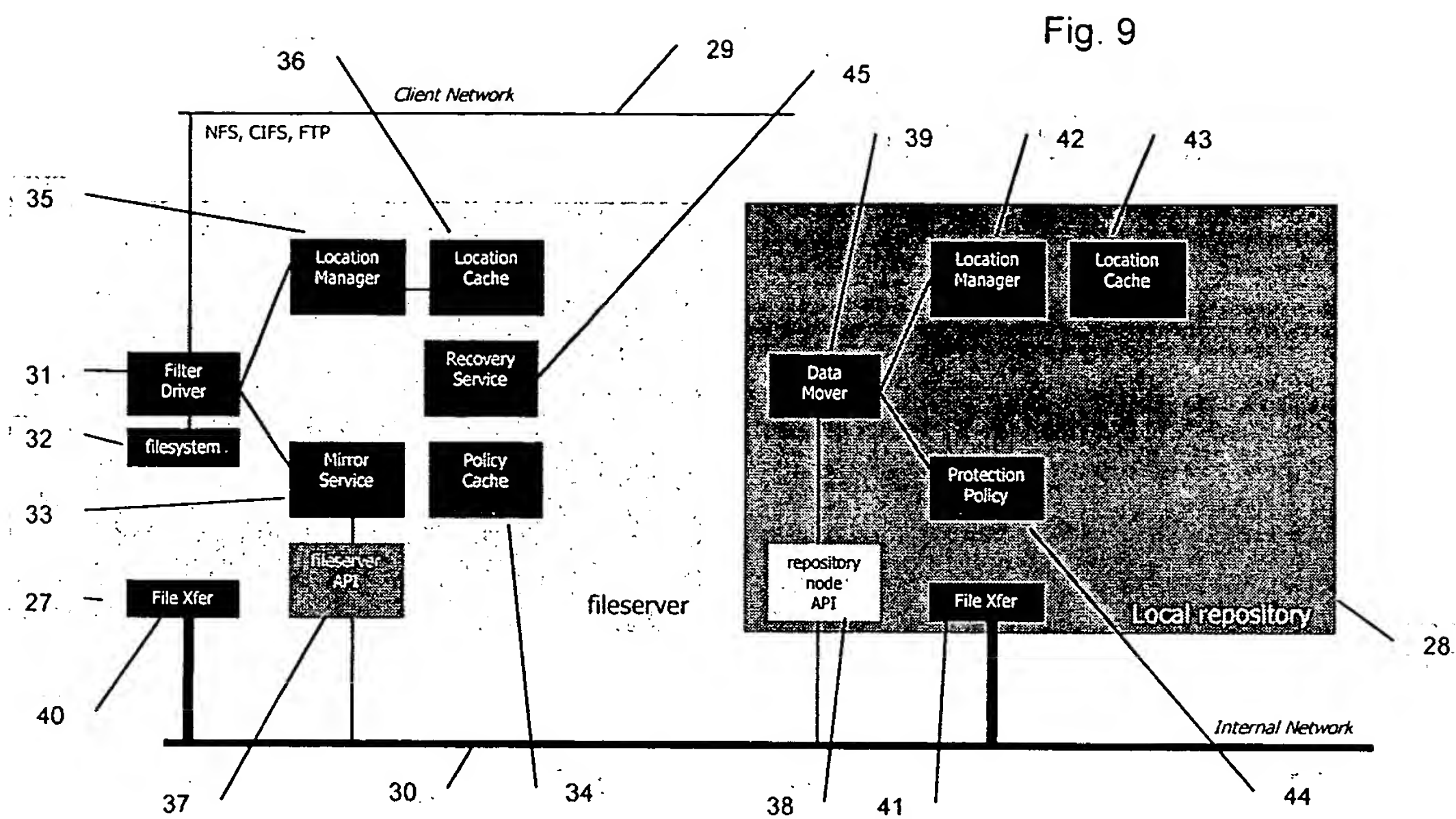


Fig 9. Apparatus and modules used to protect data to a local repository

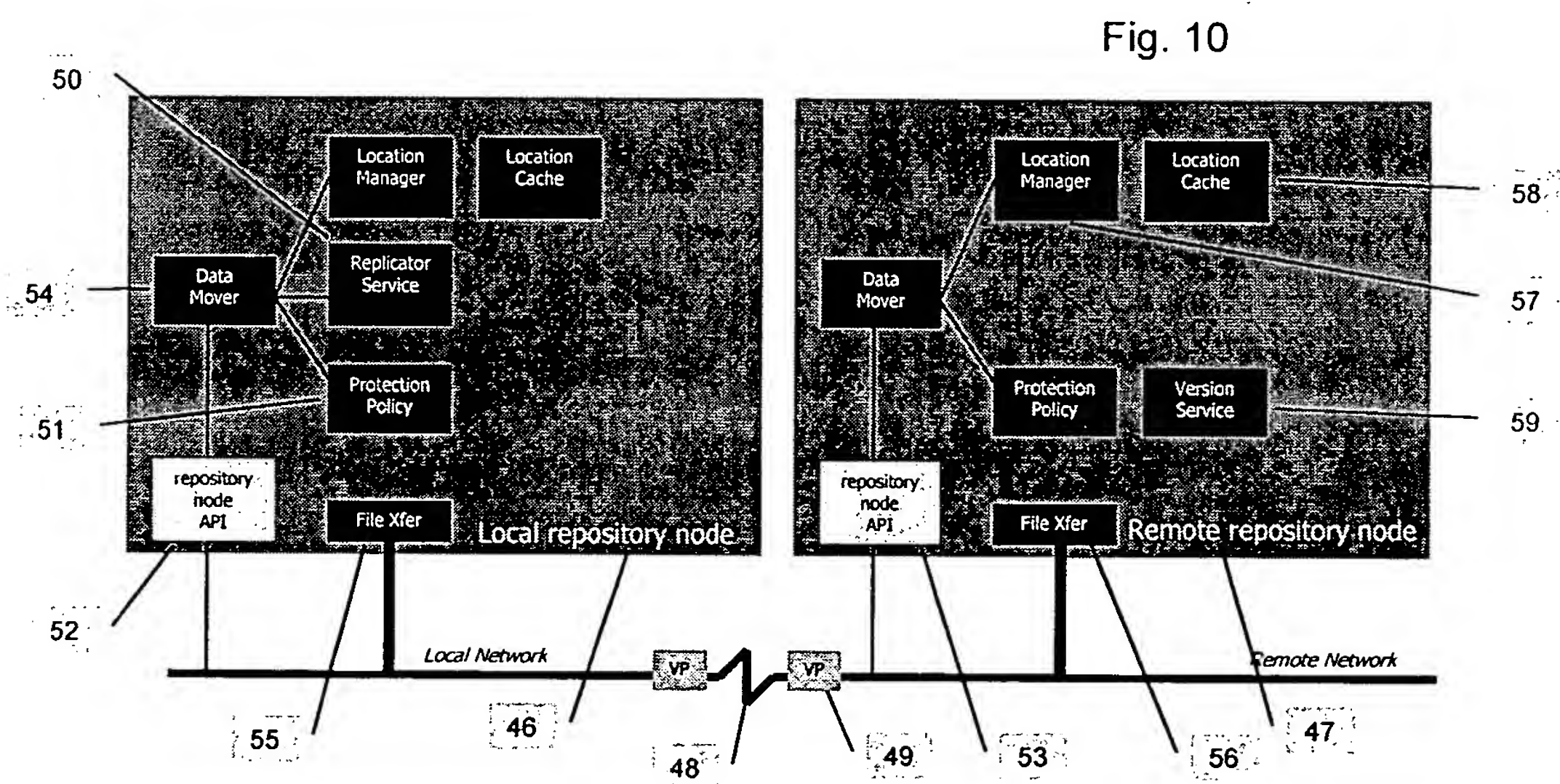


Fig 10. Inter-repository replication

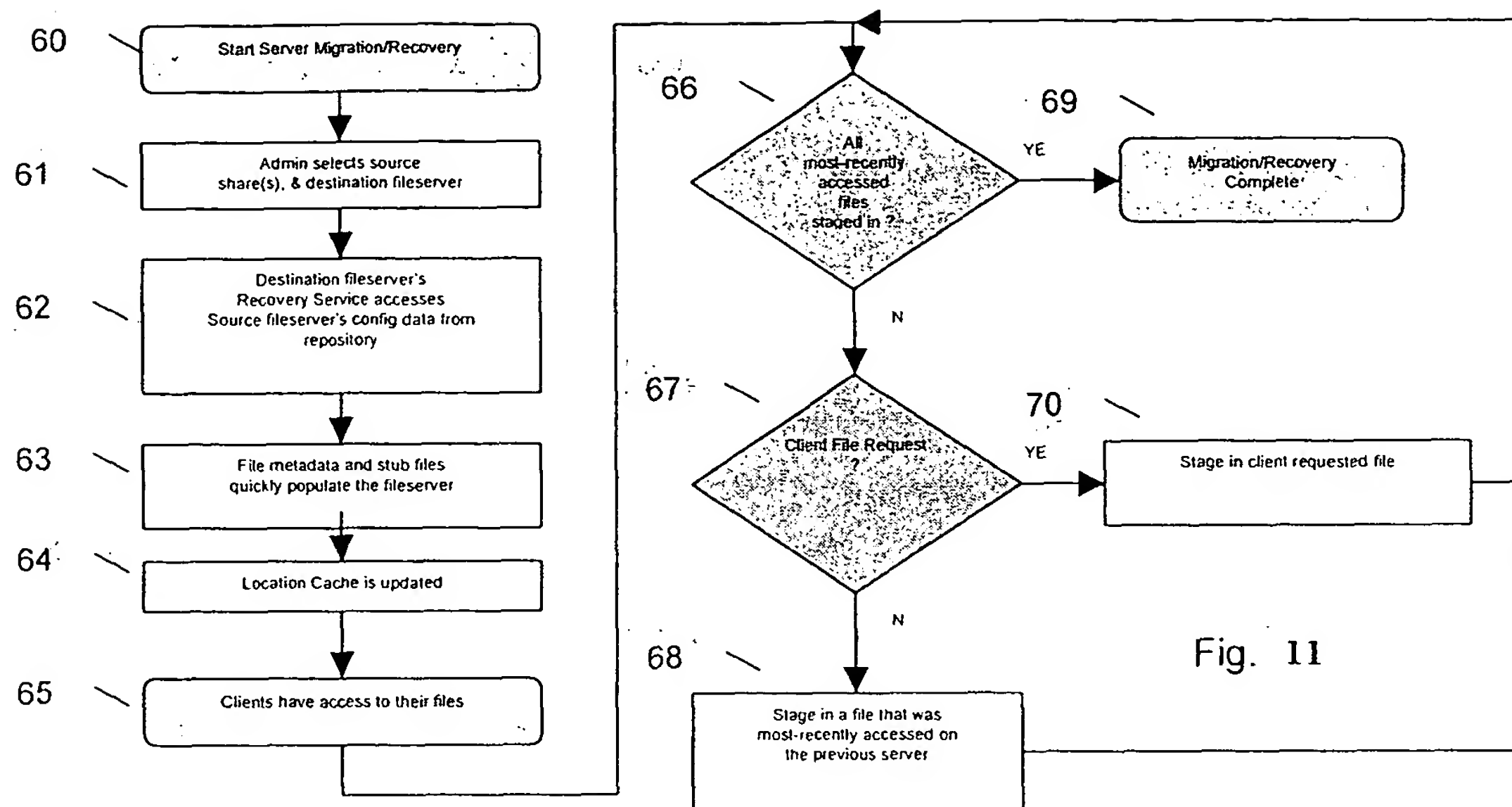


Figure 11: Two-stage Share Migration/Recovery Procedure

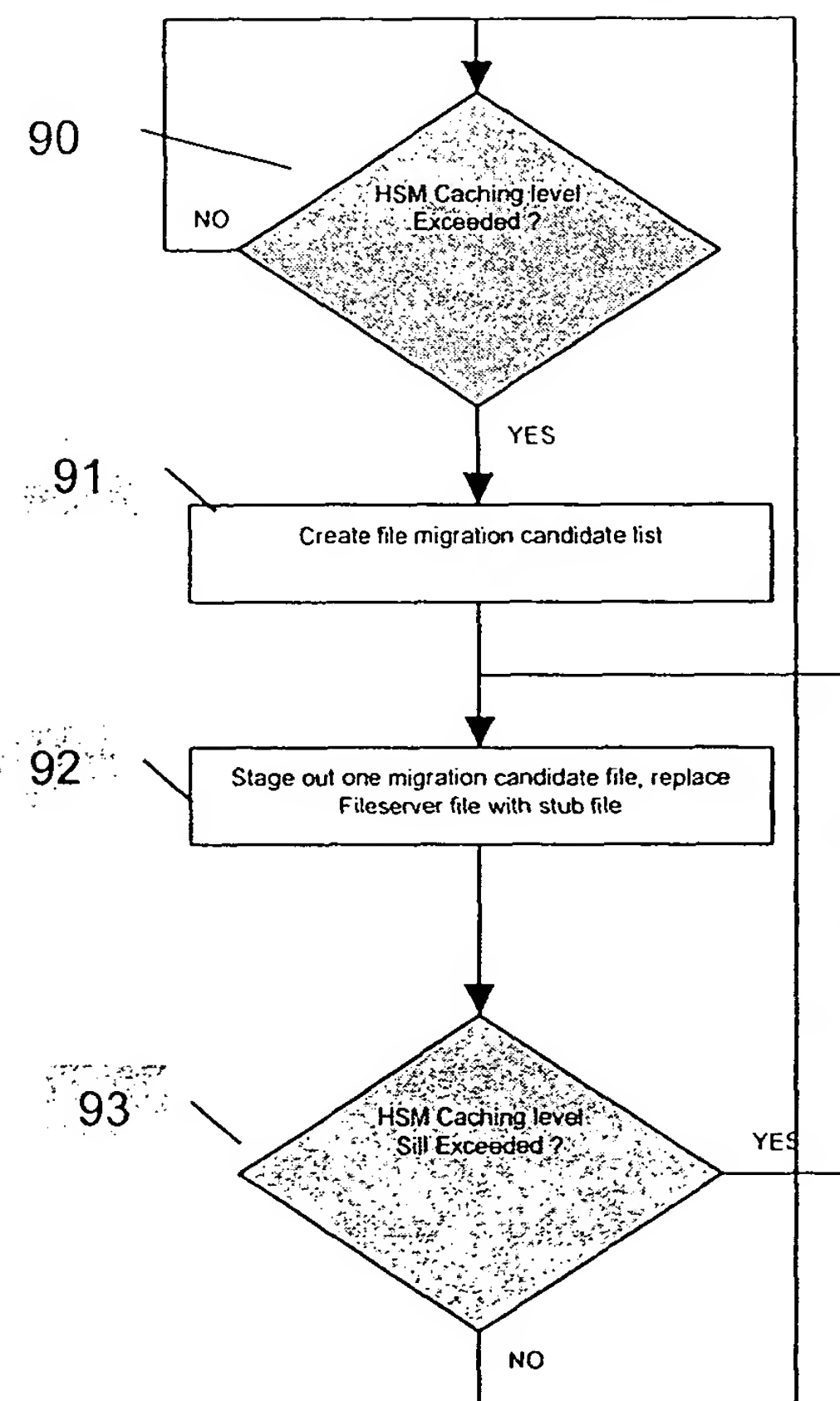


Fig. 12

Figure 12: Fileserver Caching and Stage-out Process

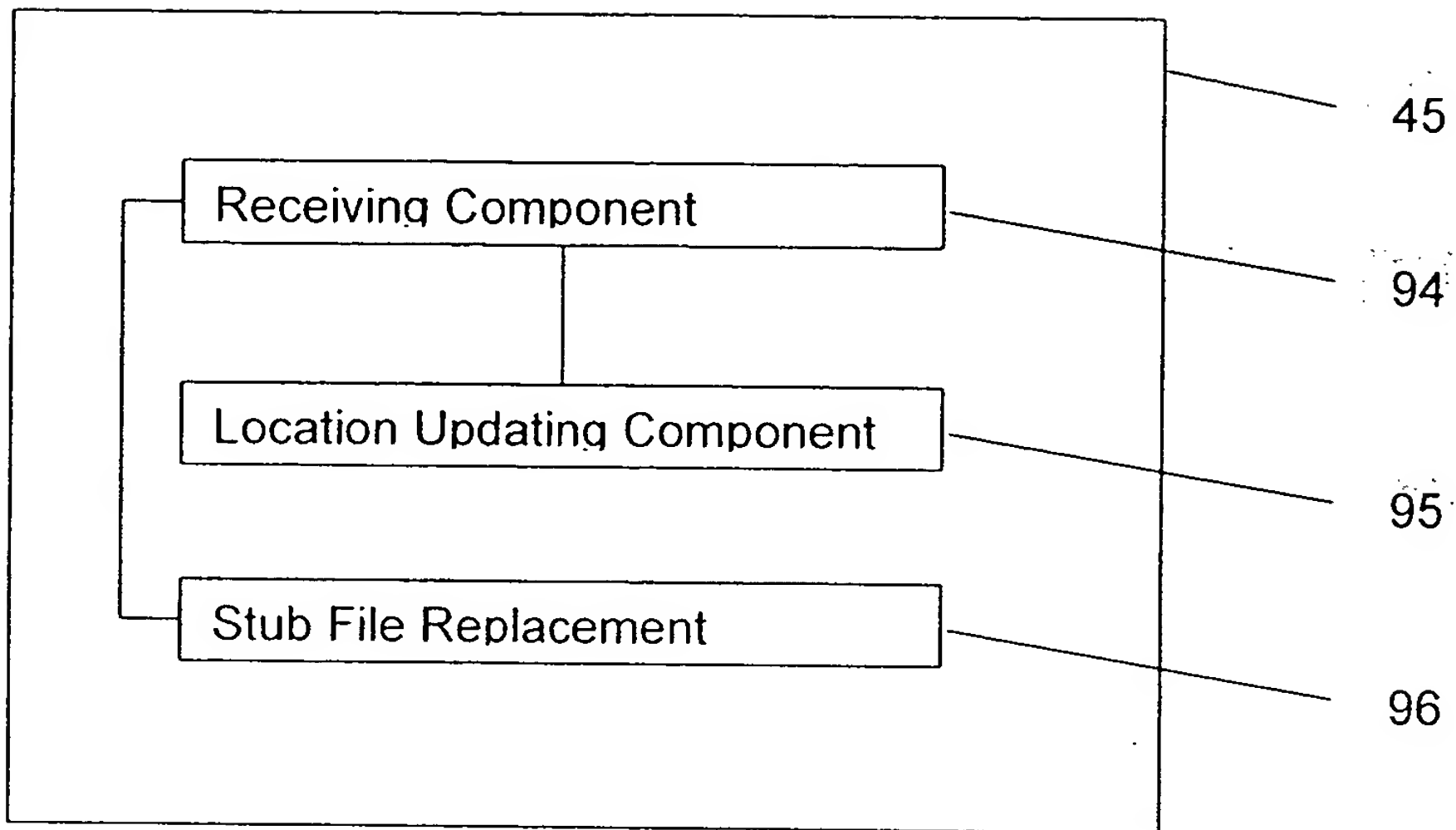


Figure 13: Recovery Service schematic